

IN THE SPECIFICATION:

Please amend the Specification by replacing the paragraphs with the amended paragraphs as shown below. Changes to replacement, amended paragraphs below are indicated by strikethrough and underlining.

BSH 9-5-07

Please replace the paragraph beginning on page 9 at line ⁴ with the following amended paragraph.

A diagram illustrating an ROI filter 300 is provided in FIG. 3. The ~~shaded~~ area 301 (e.g., an ellipse) bounded by the boundary 303 indicates the region in which path information is retained. All paths or segments of paths that lie outside the ~~shaded~~ area 301 bounded by the boundary 303 are removed when the paths are first read from the consolidated event file 230.

BSH 9-5-07

Please replace the paragraph beginning on page 16 at line ⁷ with the following amended paragraph.

Referring to FIG. 6, the end point 601 of Path1 (602) and the start point 603 of Path 2 (604) fall within ~~the~~ an acceptable distance, as denoted by the time-space bubble 605 in this figure. If ~~(T2-T2) < Max Time~~ (T2-T1) < Max Time, then the two paths can be linked.

BSH 9-5-07

Please replace the paragraph beginning on page ³⁴ ~~16~~ at line ¹⁴ with the following amended paragraph.

From probability theory, it is known that if we have N independent and identically distributed random variables with mean μ and a standard deviation σ , its average will have a mean μ as well, but its standard deviation will be reduced to σ/\sqrt{N} . Although this concept cannot be applied directly to our calculations since the system is dealing with maximum errors instead of standard deviations and we do not have ~~id~~ id variables, intuition tells us that the errors will be reduced in a similar form in which the standard deviation is reduced, in general, unless the maximum possible error ~~happen~~ happens to occur in each of our terms, something very unlikely.